CLAIMS

We claim:

1. A process for fabricating bamboo chips suitable for structural use, wherein the bamboo shoot is cut into pieces under 6" in length and then one splits the shoot lengthways, many times parallel to its length to produce thin bamboo chips of under 1/8" in thickness, when the shoot is split radially, the chip width is the thickness of the bamboo shoot wall; and when the shoot is split vertically and horizontally, the maximum width used is ¾", maximum thickness of 1/8", then, the bamboo chips are softened and the chips dried to less than 12% humidity.

2. The process as claimed in claim 1 wherein said step of chips softening comprises exposing the bamboo chips to any combination of the following treatments:

    I. oxidation by chlorine or chlorine byproducts in water, rinsed, then dried to less than 12% humidity and coated with glue

    II. chemical reaction by hydrochloric acid or potassium hydroxide and water, rinsed, then dried to less than 12% humidity and coated with glue.

    III. fermentation via yeast in warm water followed by boiling, rinsed, then dried to less than 12% humidity and coated with glue

    IV. biological reduction via bacterial liquor in warm water followed by boiling, rinsed, then dried to less than 12% humidity and coated with glue

    V. boiling in salt solution, rinsed, then dried to less than 12% humidity and coated with glue.

    VI. coating chips with hot glue

3. The method as defined in claim 2, wherein the glue coated chips are located on top of each other in a random overlapping manner, wherein the chips are joined together with glue under pressure in a form, with the result that there is great coherence between and within the chips to form a bamboo board; then once the glue is cured, the resulting board is kiln dried to below 12% humidity and sealed for moisture, therefor boards of various thickness may be produced with this method depending upon the initial chip form depth and chip form width of chips

compressed and glued, and furthermore, laminate of any material may be glued to the exterior surface of the board for improved appearance.

4. The method as defined in claim 2, wherein a board produced by claim 3 has its the chip strands generally oriented parallel to the length of the form, to form a bamboo board, chipboard, beam, or column.
5. The method as defined in claim 2, wherein a board produced by claim 3 has its the chip strands generally oriented perpendicular to the length of the form, to form a bamboo board, chipboard, beam, or column.
6. The method as defined in claim 2, wherein a board produced by claim 3 has its the chip strands generally oriented at any angle to the length of the form, to form a bamboo board, chipboard, beam, or column.
7. The method as defined in claim 2, wherein a board produced by claim 3 has its the chip strands oriented randomly to the other strands in the form, to form a bamboo board, chipboard, beam, or column.
8. The method as defined in claim 2, wherein several boards produced by claim 3 may be produced, with the chip strands generally oriented parallel to the length of the form, and glued together under pressure in a form, with the result that there is great coherence between the board layers to form a thicker bamboo member, wherein various board dimensions can be fabricated and glued together to form large bamboo members in any dimension, and once the glue is cured, the resulting larger board, beam, or column is kiln dried to below 12% humidity and sealed for moisture, and furthermore, laminate of any material may be glued to the exterior surface of the member for improved appearance.
9. The method as defined in claim 2, wherein several boards produced by claim 3 may be produced and glued together under pressure in a form, with the result that there is great coherence between the board layers to form a thicker bamboo member, wherein the first board's chip strands are generally orientated parallel to the board length, the second board's chip strands are generally orientated perpendicular to the first, and then each additional boards chip's orientation is perpendicular to the next, therefor, various board dimensions can be fabricated and glued together to form large bamboo members in any dimension, and once the glue is cured, the resulting member is kiln dried to below 12% humidity and sealed for moisture and furthermore,

laminate of any material may be glued to the exterior surface of the member for improved appearance.

10. The method as defined in claim 2, wherein several boards produced by claim 3 may be produced and glued together under pressure in a form, with the result that there is great coherence between the board layers to form a thicker bamboo member, wherein the first board's chip strands are generally orientated parallel to the board length, the second board's chip strands are generally orientated at a large angle to the first, the third board's chip strands are generally orientated parallel to the board length, the next board's chip strands are generally orientated at a large angle to the previous, and then each additional layer continues to alternate with the next, therefor, various board dimensions can be fabricated and glued together to form large bamboo members in any dimension, and once the glue is cured, the resulting larger board, beam, or column is kiln dried to below 12% humidity and sealed for moisture, and furthermore, laminate of any material may be glued to the exterior surface of the member for improved appearance.
11. The method as defined in claim 2, wherein several boards produced by claim 3 may be produced and glued together under pressure in a form, with the result that there is great coherence between the board layers to form a thicker bamboo member, wherein the first board's chip strands are generally orientated parallel to the board length, the second board's chip strands are generally orientated at a large angle to the first, the third board's chip strands are generally orientated parallel to the board length, the next board's chip strands are orientated at any angle to the previous, and then each additional layer continues to alternate with the next, therefor, various board dimensions can be fabricated and glued together to form large bamboo members in any dimension, and once the glue is cured, the resulting larger board, beam, or column is kiln dried to below 12% humidity and sealed for moisture, and furthermore, laminate of any material may be glued to the exterior surface of the member for improved appearance.
12. The method as defined in claim 2, wherein several boards produced by claim 3 may be produced and glued together under pressure in a form, with the result that there is great coherence between the board layers to form a thicker bamboo member, wherein the two exterior board's chip strands are generally orientated parallel to the board length, and each interior board's chip strands are generally orientated at a large angle to the board length, thereby various board dimensions can be fabricated and glued together to form large bamboo columns in any dimension, and once the glue is cured, the resulting larger board, beam, or column is kiln dried

to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the member for improved appearance.

13. The method as defined in claim 2, wherein several boards produced by claim 3 may be produced and glued together under pressure in a form, with the result that there is great coherence between the board layers to form a thicker bamboo member, wherein the two exterior board's chip strands are generally orientated parallel to the board length, and each interior board's chip strands are generally orientated perpendicular to the board length, thereby various board dimensions can be fabricated and glued together to form large bamboo columns in any dimension, and once the glue is cured, the resulting larger board, beam, or column is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the member for improved appearance.
14. The method as defined in claim 2, wherein several boards produced by claim 3 may be produced and glued together under pressure in a form, with the result that there is great coherence between the board layers to form a thicker bamboo member, wherein the two exterior board's chip strands are generally orientated parallel to the board length, and each interior board's chip strands are generally orientated at any angle to the board length, thereby various board dimensions can be fabricated and glued together to form large bamboo columns in any dimension, and once the glue is cured, the resulting larger board, beam, or column is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the member for improved appearance.
15. The method as defined in claim 3, wherein using a wide form, large sheets of bamboo chipboard are formed. Once the glue is cured, the resulting multi-ply bamboo is kiln dried to below 12% humidity and sealed for moisture.
16. The method as defined in claim 3, wherein using a wide form, large sheets of bamboo chipboard are formed, and once this first large chipboard is complete, having major and minor surfaces, several chipboard layers of matching dimensions are fabricated in large sheets , whereby each major surface of each board is glued to the next major surface of the next chipboard under pressure in a form, to form a thicker chipboard as 'multi-ply bamboo', which is a bamboo substitute for plywood, wherein the fibers of each chipboard are oriented at any angle and once the glue is cured, the resulting multi-ply bamboo is kiln dried to below 12% humidity and sealed

for moisture, furthermore, laminate of any material may be glued to the exterior surface of the column for improved appearance.

17. The method as defined in claim 3, wherein using a wide form, large sheets of bamboo chipboard are formed, and once this first large chipboard is complete, having major and minor surfaces, several chipboard layers of matching dimensions are fabricated in large sheets , whereby each major surface of each board is glued to the next major surface of the next chipboard under pressure in a form, to form a thicker chipboard as 'multi-ply bamboo', which is a bamboo substitute for plywood, furthermore, the first board's chip strands are generally orientated parallel to the board length, the second board's chip strands are generally orientated perpendicular to the first, and then each additional boards chip's orientation is perpendicular to the next, and, once the glue is cured, the resulting multi-ply bamboo is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the column for improved appearance.
18. The method as defined in claim 3, wherein using a wide form, large sheets of bamboo chipboard are formed, where, once this first large chipboard is complete, having major and minor surfaces, several chipboard layers of matching dimensions are fabricated in large sheets , where each major surface of each board is glued to the next major surface of the next chipboard under pressure in a form, to form a thicker chipboard as 'multi-ply bamboo', which is a bamboo substitute for plywood, furthermore, the first board's chip strands are generally orientated parallel to the board length, the second board's chip strands are generally orientated at a large angle to the first, the third board's chip strands are generally orientated parallel to the board length, the next board's chip strands are generally orientated at a large angle to the previous, and then each additional layer continues to alternates with the next, and once the glue is cured, the resulting multi-ply bamboo is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the column for improved appearance.
19. The method as defined in claim 3, wherein using a wide form, large sheets of bamboo chipboard are formed, and once this first large chipboard is complete, having major and minor surfaces, several chipboard layers of matching dimensions are fabricated in large sheets , where each major surface of each board is glued to the next major surface of the next chipboard under pressure in a form, to form a thicker chipboard as 'multi-ply bamboo', which is a bamboo

substitute for plywood, wherein the two outer chipboard's chip strands are generally orientated parallel to the board length, and the interior chipboard's chip strands are generally orientated perpendicular to each interior board's length, and once the glue is cured, the resulting multi-ply bamboo is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the column for improved appearance.

20. The method as defined in claim 3, wherein using a wide form, large sheets of bamboo chipboard are formed, and once this first large chipboard is complete, having major and minor surfaces, several chipboard layers of matching dimensions are fabricated in large sheets , where each major surface of each board is glued to the next major surface of the next chipboard under pressure in a form, to form a thicker chipboard as 'multi-ply bamboo', which is a bamboo substitute for plywood, wherein the two exterior board's chip strands are generally orientated parallel to the board length, and each interior board's chip strands are generally orientated at a large angle to the board length, and once the glue is cured, the resulting multi-ply bamboo is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the column for improved appearance.
21. The method as defined in claim 3, wherein using a wide form, large sheets of bamboo chipboard are formed, and once this first large chipboard is complete, having major and minor surfaces, several chipboard layers of matching dimensions are fabricated in large sheets , where each major surface of each board is glued to the next major surface of the next chipboard under pressure in a form, to form a thicker chipboard as 'multi-ply bamboo', which is a bamboo substitute for plywood, wherein the two exterior board's chip strands are generally orientated parallel to the board length, and each interior board's chip strands are orientated at any angle to the board length, and once the glue is cured, the resulting multi-ply bamboo is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the column for improved appearance.
22. The method as defined in claim 3, wherein using a wide form, large sheets of bamboo chipboard are formed, and once this first large chipboard is complete, having major and minor surfaces, several chipboard layers of matching dimensions are fabricated in large sheets , where each major surface of each board is glued to the next major surface of the next chipboard under pressure in a form, to form a thicker chipboard as 'multi-ply bamboo', which is a bamboo substitute for plywood, wherein the two exterior board's chip strands are generally orientated

parallel to the board length, and each interior board's chip strands are also generally orientated parallel to the board length, and once the glue is cured, the resulting multi-ply bamboo is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the column for improved appearance.

23. A process for fabricating bamboo chips suitable for structural use, wherein the bamboo shoot is fed through a rotating blade machine and cut into many thin separate bamboo lengths of under 1/8" in thickness, then the bamboo lengths are cut to form chips of under 6" in length, softened, and then the bamboo chips are dried to less than 12% humidity.
24. The process as claimed in claim 23 wherein said step of chips softening comprises exposing the bamboo chips to any combination of the following treatments:
    - I. oxidation by chlorine or chlorine byproducts in water, rinsed, then dried to less than 12% humidity and coated with glue
    - II. chemical reaction by hydrochloric acid or potassium hydroxide and water, rinsed, then dried to less than 12% humidity and coated with glue.
    - III. fermentation via yeast in warm water followed by boiling, rinsed, then dried to less than 12% humidity and coated with glue
    - IV. biological reduction via bacterial liquor in warm water followed by boiling, rinsed, then dried to less than 12% humidity and coated with glue
    - V. boiling in salt solution, rinsed, then dried to less than 12% humidity and coated with glue.
    - VI. coating chips with hot glue
25. The method as defined in claim 24, wherein the glue coated chips are located on top of each other in a random overlapping manner, wherein the chips are joined together with glue under pressure in a form, with the result that there is great coherence between and within the chips to form a bamboo board; then once the glue is cured, the resulting member is kiln dried to below 12% humidity and sealed for moisture, therefor boards of various thickness may be produced with this method depending upon the initial depth of chips compressed and glued, and furthermore, laminate of any material may be glued to the exterior surface of the board for improved appearance.

26. The method as defined in claim 24, wherein a board produced by claim 25 has its the chip strands generally oriented parallel to the length of the form, to form a bamboo board, chipboard, beam, or column.
27. The method as defined in claim 24, wherein a board produced by claim 25 has its the chip strands generally oriented perpendicular to the length of the form, to form a bamboo board, chipboard, beam, or column.
28. The method as defined in claim 24, wherein a board produced by claim 25 has its the chip strands oriented at any angle to the length of the form, to form a bamboo board, chipboard, beam, or column.
29. The method as defined in claim 24, wherein a board produced by claim 25 has its the chip strands oriented randomly to the other strands in the form, to form a bamboo board, chipboard, beam, or column.
30. The method as defined in claim 24, wherein several boards by claim 25 may be produced, whereby the boards chip strands being generally oriented parallel to the length of the form, and glued together under pressure in a form, with the result that there is great coherence between the board layers to form a thicker bamboo member, thereby various board dimensions can be fabricated and glued together to form large bamboo larger board, beam, or columns in any dimension, and once the glue is cured, the resulting member is kiln dried to below 12% humidity and sealed for moisture.
31. The method as defined in claim 24, wherein several boards produced by claim 25 may be produced and glued together under pressure in a form, with the result that there is great coherence between the board layers to form a thicker bamboo member, wherein the first board's chip strands are generally orientated parallel to the board length, the second board's chip strands are generally orientated perpendicular to the first, and then each additional boards chip's orientation is perpendicular to the next, thereby, various board dimensions can be fabricated and glued together to form large bamboo larger board, beam, or columns in any dimension, and once the glue is cured, the resulting member is kiln dried to below 12% humidity and sealed for moisture, furthermore, the laminate of any material may be glued to the exterior surface of the member for improved appearance.
32. The method as defined in claim 24, wherein several boards produced by claim 25 may be produced and glued together under pressure in a form, with the result that there is great

coherence between the board layers to form a thicker bamboo member, wherein the first board's chip strands are generally orientated parallel to the board length, the second board's chip strands are generally orientated at a large angle to the first, the third board's chip strands are generally orientated parallel to the board length, the next board's chip strands are generally orientated at a large angle to the previous, and then each additional layer continues to alternate with the next, thereby, various board dimensions can be fabricated and glued together to form large bamboo members in any dimension and once the glue is cured, the resulting larger board, beam, or column is kiln dried to below 12% humidity and sealed for moisture, furthermore, the laminate of any material may be glued to the exterior surface of the member for improved appearance.

33. The method as defined in claim 24, wherein several boards produced by claim 25 may be produced and glued together under pressure in a form, with the result that there is great coherence between the board layers to form a thicker bamboo member, wherein the two exterior board's chip strands are generally orientated parallel to the board length, and each interior board's chip strands are generally orientated at a large angle to the board length, thereby various board dimensions can be fabricated and glued together to form large bamboo columns in any dimension, and once the glue is cured, the resulting larger board, beam, or column is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the member for improved appearance.
34. The method as defined in claim 24, wherein several boards produced by claim 25 may be produced and glued together under pressure in a form, with the result that there is great coherence between the board layers to form a thicker bamboo member, wherein the two exterior board's chip strands are generally orientated parallel to the board length, and each interior board's chip strands are generally orientated perpendicular to the board length, thereby various board dimensions can be fabricated and glued together to form large bamboo columns in any dimension, and once the glue is cured, the resulting larger board, beam, or column is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the member for improved appearance.
35. The method as defined in claim 24, wherein several boards produced by claim 25 may be produced and glued together under pressure in a form, with the result that there is great coherence between the board layers to form a thicker bamboo member, wherein the two exterior board's chip strands are generally orientated parallel to the board length, and each interior

board's chip strands are orientated at any angle to the board length, thereby various board dimensions can be fabricated and glued together to form large bamboo columns in any dimension, and once the glue is cured, the resulting larger board, beam, or column is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the member for improved appearance.

36. The method as defined in claim 25, wherein using a wide form, large sheets of bamboo chipboard are formed, and once this first large chipboard is complete, having major and minor surfaces, several chipboard layers of matching dimensions are fabricated in large sheets , whereby each major surface of each board is glued to the next major surface of the next chipboard under pressure in a form, to form a thicker chipboard as 'multi-ply bamboo', which is a bamboo substitute for plywood, wherein the fibers of each chipboard are generally oriented at any angle and once the glue is cured, the resulting multi-ply bamboo is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the column for improved appearance.
37. The method as defined in claim 25, wherein using a wide form, large sheets of bamboo chipboard are formed, and once this first large chipboard is complete, having major and minor surfaces, several chipboard layers of matching dimensions are fabricated in large sheets , whereby each major surface of each board is glued to the next major surface of the next chipboard under pressure in a form, to form a thicker chipboard as 'multi-ply bamboo', which is a bamboo substitute for plywood, furthermore, the first board's chip strands are generally orientated parallel to the board length, the second board's chip strands are generally orientated perpendicular to the first, and then each additional boards chip's orientation is perpendicular to the next, and, once the glue is cured, the resulting multi-ply bamboo is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the column for improved appearance.
38. The method as defined in claim 25, wherein using a wide form, large sheets of bamboo chipboard are formed, where, once this first large chipboard is complete, having major and minor surfaces, several chipboard layers of matching dimensions are fabricated in large sheets , where each major surface of each board is glued to the next major surface of the next chipboard under pressure in a form, to form a thicker chipboard as 'multi-ply bamboo', which is a bamboo substitute for plywood, furthermore, the first board's chip strands are generally orientated

parallel to the board length, the second board's chip strands are generally orientated at a large angle to the first, the third board's chip strands are generally orientated parallel to the board length, the next board's chip strands are generally orientated at a large angle to the previous, and then each additional layer continues to alternates with the next, and once the glue is cured, the resulting multi-ply bamboo is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the column for improved appearance.

39. The method as defined in claim 25, wherein using a wide form, large sheets of bamboo chipboard are formed, and once this first large chipboard is complete, having major and minor surfaces, several chipboard layers of matching dimensions are fabricated in large sheets , where each major surface of each board is glued to the next major surface of the next chipboard under pressure in a form, to form a thicker chipboard as 'multi-ply bamboo', which is a bamboo substitute for plywood, wherein the two outer chipboard's chip strands are generally orientated parallel to the board length, and the interior chipboard's chip strands are generally orientated perpendicular to each interior board's length, and once the glue is cured, the resulting multi-ply bamboo is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the column for improved appearance.
40. The method as defined in claim 25, wherein using a wide form, large sheets of bamboo chipboard are formed, and once this first large chipboard is complete, having major and minor surfaces, several chipboard layers of matching dimensions are fabricated in large sheets , where each major surface of each board is glued to the next major surface of the next chipboard under pressure in a form, to form a thicker chipboard as 'multi-ply bamboo', which is a bamboo substitute for plywood, wherein the two exterior board's chip strands are generally orientated parallel to the board length, and each interior board's chip strands are generally orientated at a large angle to the board length, and once the glue is cured, the resulting multi-ply bamboo is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the column for improved appearance.
41. The method as defined in claim 25, wherein using a wide form, large sheets of bamboo chipboard are formed, and once this first large chipboard is complete, having major and minor surfaces, several chipboard layers of matching dimensions are fabricated in large sheets , where each major surface of each board is glued to the next major surface of the next chipboard under

pressure in a form, to form a thicker chipboard as 'multi-ply bamboo', which is a bamboo substitute for plywood, wherein the two exterior board's chip strands are generally orientated parallel to the board length, and each interior board's chip strands are orientated at any angle to the board length, and once the glue is cured, the resulting multi-ply bamboo is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the column for improved appearance.

42. The method as defined in claim 25, wherein using a wide form, large sheets of bamboo chipboard are formed, and once this first large chipboard is complete, having major and minor surfaces, several chipboard layers of matching dimensions are fabricated in large sheets , where each major surface of each board is glued to the next major surface of the next chipboard under pressure in a form, to form a thicker chipboard as 'multi-ply bamboo', which is a bamboo substitute for plywood, wherein the two exterior board's chip strands are generally orientated parallel to the board length, and each interior board's chip strands are also generally generally orientated parallel to the board length, and once the glue is cured, the resulting multi-ply bamboo is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the column for improved appearance.
43. A process for fabricating bamboo chips suitable for structural use, wherein the bamboo shoot may be cut into pieces under 6" in length, and then one splits the shoot lengthways, many times, parallel to its length to produce thin bamboo chips of under 1/8" in thickness, when the shoot is split radially, the chip width is the thickness of the bamboo shoot wall; and when the shoot is split vertically and horizontally, the maximum width used is ¾", then the bamboo chips from either method are dried to less than 12% humidity, wherein the resulting chips are coated with glue and then the chips are located on top of each other in a random overlapping manner, wherein the chips are joined together with glue under pressure in a form, with the result that there is great coherence between and within the chips to form a bamboo board, beam, column, or chipboard, whereby members of various dimensions may be produced with this method depending upon the initial depth and width of chips compressed and glued in the form, and furthermore, the resulting member is kiln dried to below 12% humidity and sealed for moisture.
44. The method as defined in claim 43, wherein a board produced has its the chip strands generally oriented parallel to the length of the form, to form a bamboo board, chipboard, beam, or column.

45. The method as defined in claim 43, wherein a board produced has its the chip strands generally oriented perpendicular to the length of the form, to form a bamboo board, chipboard, beam, or column.
46. The method as defined in claim 43, wherein a board produced has its the chip strands oriented at any angle to the length of the form, to form a bamboo board, chipboard, beam, or column.
47. The method as defined in claim 43, wherein a board produced has its the chip strands oriented randomly to the other strands in the form, to form a bamboo board, chipboard, beam, or column.
48. The method as defined in claim 43, wherein several boards produced by claim 43 may be produced and glued together under pressure in a form, with the result that there is great coherence between the board layers to form a thicker bamboo member, wherein the two exterior board's chip strands are generally orientated parallel to the board length, and each interior board's chip strands are orientated at any angle to the board length, thereby various board dimensions can be fabricated and glued together to form large bamboo members in any dimension, and once the glue is cured, the resulting larger board, beam, or column is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the member for improved appearance.
49. The method as defined in claim 43, wherein using a wide form, large sheets of bamboo chipboard are formed, and once this first large chipboard is complete, having major and minor surfaces, several chipboard layers of matching dimensions are fabricated in large sheets , where each major surface of each board is glued to the next major surface of the next chipboard under pressure in a form, to form a thicker chipboard as 'multi-ply bamboo', which is a bamboo substitute for plywood, wherein the two exterior board's chip strands are generally orientated parallel to the board length, and each interior board's chip strands are orientated at a any angle to the board length, and once the glue is cured, the resulting multi-ply bamboo is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the column for improved appearance.
50. A process for fabricating bamboo chips suitable for structural use, wherein the bamboo shoot is fed through a rotating blade machine and cut into many thin separate bamboo lengths of under 1/8" in thickness, the bamboo lengths are cut to form chips of under 6" in length, and then, the chips are dried to less than 12% humidity, wherein the resulting chips are coated with glue and then the chips are located on top of each other in a random overlapping manner, wherein the

chips are joined together with glue under pressure in a form, with the result that there is great coherence between and within the chips to form a bamboo board, beam, column, or chipboard, whereby members of various dimensions may be produced with this method depending upon the initial depth and width of chips compressed and glued in the form, and furthermore, the resulting member is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the column for improved appearance.

51. The method as defined in claim 50, wherein a board produced has its the chip strands generally oriented parallel to the length of the form, to form a bamboo board, chipboard, beam, or column.
52. The method as defined in claim 50, wherein a board produced has its the chip strands generally oriented perpendicular to the length of the form, to form a bamboo board, chipboard, beam, or column.
53. The method as defined in claim 50, wherein a board produced has its the chip strands oriented at any angle to the length of the form, to form a bamboo board, chipboard, beam, or column.
54. The method as defined in claim 50, wherein a board produced has its the chip strands oriented randomly to the other strands in the form, to form a bamboo board, chipboard, beam, or column.
55. The method as defined in claim 50, wherein several boards produced by claim 50 may be produced and glued together under pressure in a form, with the result that there is great coherence between the board layers to form a thicker bamboo member, wherein the two exterior board's chip strands are generally orientated parallel to the board length, and each interior board's chip strands are orientated at any angle to the board length, thereby various board dimensions can be fabricated and glued together to form large bamboo members in any dimension, and once the glue is cured, the resulting larger board, beam, or column is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the member for improved appearance.
56. The method as defined in claim 50, wherein using a wide form, large sheets of bamboo chipboard are formed, and once this first large chipboard is complete, having major and minor surfaces, several chipboard layers of matching dimensions are fabricated in large sheets , where each major surface of each board is glued to the next major surface of the next chipboard under pressure in a form, to form a thicker chipboard as 'multi-ply bamboo', which is a bamboo substitute for plywood, wherein the two exterior board's chip strands are generally orientated

parallel to the board length, and each interior board's chip strands are orientated at a any angle to the board length, and once the glue is cured, the resulting multi-ply bamboo is kiln dried to below 12% humidity and sealed for moisture, furthermore, laminate of any material may be glued to the exterior surface of the column for improved appearance.